

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/717,253	11/19/2003	Zachary Steven Smith	200209693-1	7763	
22879 7590 · 02/01/2007 HEWLETT PACKARD COMPANY			EXAMINER		
P O BOX 272400, 3404 E. HARMONY ROAD			GUYTON, PHILIP A		
	INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			PAPER NUMBER	
	•		2113	•	
SHORTENED STATUTO	RY PERIOD OF RESPONSE	MAIL DATE	DELIVER	DELIVERY MODE	
3 MONTHS 02/01/2007		PAP	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)					
	10/717,253	SMITH ET AL.					
Office Action Summary	Examiner	Art Unit					
	Philip Guyton	2113					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	. the mailing date of this communication. C (35 U.S.C. § 133).					
Status	•						
1) Responsive to communication(s) filed on 13 No.	ovember 2006						
•	action is non-final.						
<i>/</i> =	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) 1,2 and 4-33 is/are pending in the app	lication.	•					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>1,2,4-21 and 28-33</u> is/are allowed.							
6)⊠ Claim(s) <u>22-27</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119		*					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
<ol><li>Copies of the certified copies of the prior</li></ol>	ity documents have been receive	ed in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate					

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 22 recites "a lockstep block checker stored on a computer-readable medium, the checker comprising logic configured to..." According to the present specification a computer-readable medium is "an electronic, magnetic, optical, or other physical device or means that contains or stores a computer program for use by or in connection with a computer-related system or method" (see Specification, page 14, lines 23-25). Since this description may encompass a computer-readable medium that is non-statutory under 35 U.S.C. 101 (ie. "other physical device or means that contains or stores a computer program"), the claims are also rendered non-statutory under 35 U.S.C. 101.

# Allowable Subject Matter

- 2. Claims 1, 2, 4-21, and 28-33 are allowed.
- 3. The following is a statement of reasons for the indication of allowable subject matter:

The elements of independent claims 1 and 14 were not found through a search of the prior art, nor were they considered obvious by the examiner. In particular, the prior art of record does not teach or suggest:

As in claim 1, "comparing the detected output with an expected output for the lockstep block relative to the signals output from the modeled processor cores and a current modeled machine state; and flagging a lockstep block error if the detected output does not match the expected output."

As in claim 14, "means for determining an expected output from the modeled lockstep block relative to the monitored output from the modeled processor cores; means for comparing output from the modeled lockstep block with the expected output; and means for flagging a lockstep block error if the detected output does not match the expected output."

4. Claims 22-27 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 101, set forth in this Office action.

### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Guyton whose telephone number is (571) 272-3807. The examiner can normally be reached on M-F 8:00-4:30.

Application/Control Number: 10/717,253

Art Unit: 2113

Page 4

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PG 1/26/07

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100